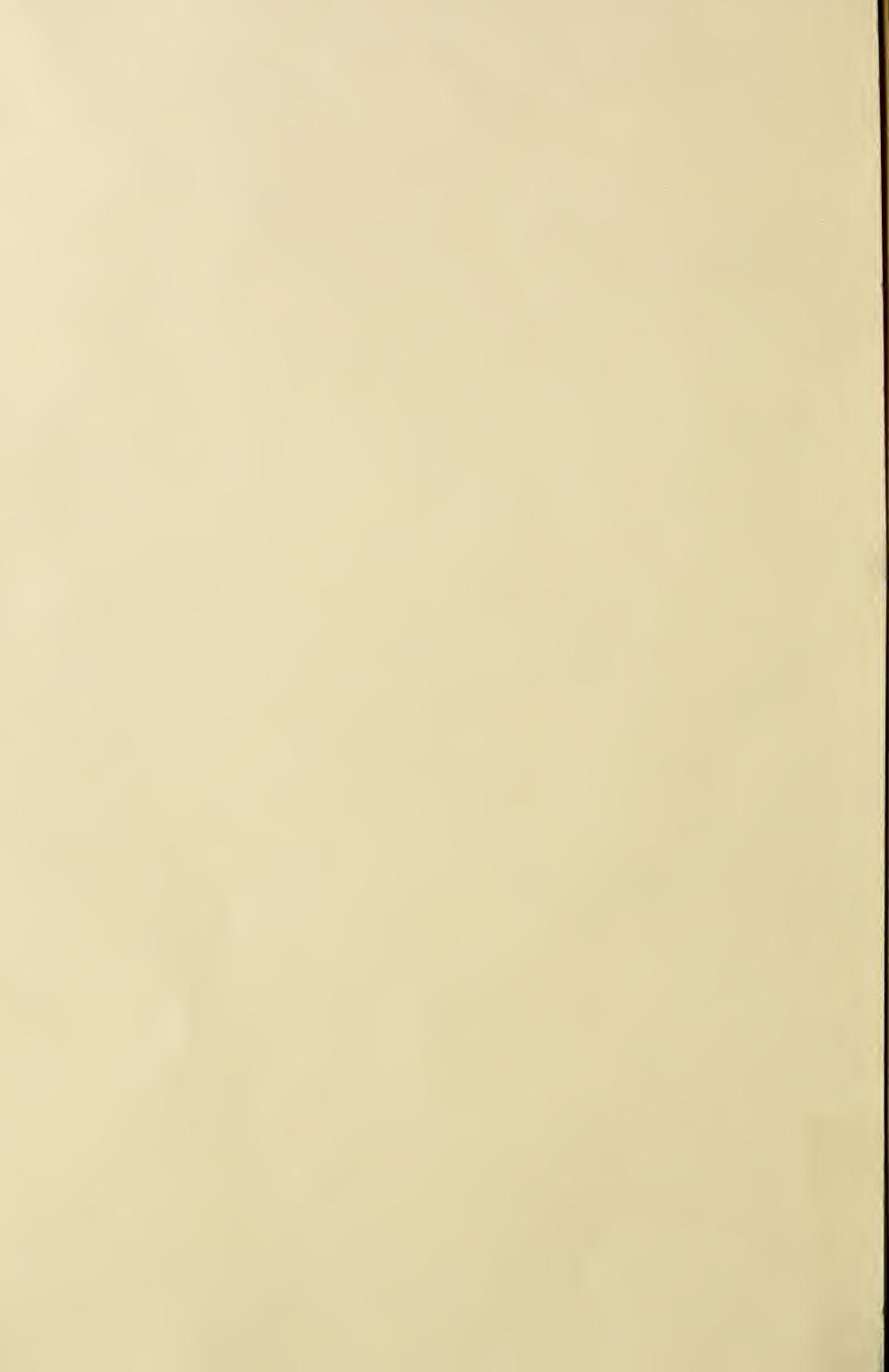


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THE OLDEST AGRICULTURAL JOURNAL IN MARYLAND, AND FOR TEN YEARS THE ONLY ONE.

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No. 6.

POSITION OF THE "MARYLAND FARMER."

We have intended that the MARYLAND FARMER should speak on all subjects with no uncertain sound, whenever we have had occasion to speak at all upon them. At the same time we have studiously avoided everything which might be of a partisan character, and have endeavored to so conduct our Journal that no exception could be taken on the score of politics or religion. While we have decided opinions on all the current topics of the day we have thought only those which would have a beneficial effect upon agriculture and the farming community were proper subjects for our Journal. In these latter particulars we have endeavored to keep abreast of the times, and have employed talent in all parts of our country to give us their most practical thoughts and experiences. Aside from this we have taken a very decided stand in a few important spheres of labor in connection with agricultural interests, and we are desirous that our readers should recognize what these are.

We have placed ourselves on the ground that it is the best interest of the Farmer that he should cultivate kindness in all his dealings with the animal world. Especially is this the case with cattle and with horses; but it should extend to all other animals, the sheep and the swine, the poultry and the birds. Whenever the occasion may arise for a favorable word in this direction we shall expect to be ready to give it. At the same time we shall not hesitate to condemn any wanton cruelty which we may discover in the practice of those who have in their charge the weal or woe of the patient and uncomplaining animals.

Another position we have taken is, that we should foster in every way all the existing facilities for promoting the education of the farmer and that we should throw all our influence in favor of increased educational facilities. While we are sure that no country in the world has a class of Farmers as intelligent as our own countrymen, we believe it is our duty to advocate better and broader opportunities for Farmers' sons and daughters to become trained

in all the various accomplishments which shall be a blessing to them in their prosecution of the agricultural enterprises, which shall fall to their lot in the future. We are, therefore, interested in every institution of learning which can give them a higher standard of intelligence and a better understanding of the principles which underlie all their work.

Another item is, we have advocated that in all the gatherings where Farmers and farmers' Families are assembled, a strict care should be taken that the best moral influences should surround them. We have urged these gatherings, but we would have the social influences unexceptionable. Particularly in connection with exhibitions and fairs, we have opposed and shall oppose in the future in the strongest language, the gambling, the obscene side-shows, the sickening exhibitions of depravity which in some cases are or have been licensed by those who have had the management of these fairs and annual gatherings of our Farmers.

We have also held the position that the farming interests should be recognized and generously aided by the State and general Government; that the needs of the agriculturists have been overlooked, neglected or ignored to a scandalous extent, and the time has come for determined and united action on the part of the people to have such laws enacted and such aid given to the Farmer as may place his occupation on an equal footing, so far as our Government is concerned, with manufacturing or commercial interests.

These broad and general fields of work have been always before the MARYLAND FARMER and have inspired many of our writings and made much of our hardest labor only a pleasure.

We have, however, been influenced by many other principles equally important, even if they were not so broad or far-reaching. For example, we have taken

the position that they who improve the character of our agricultural products should have the honor and reward for their labor. We would be glad to have some means invented by which they and their descendants might realize how great is the debt of gratitude the country owes them. Perhaps this may yet be in the power of our Government to accomplish through the awakened energy of our people and the wisdom which the Farmers may be able to impart to our rulers.

We have endeavored to take this high position and to give to the community a Magazine on this plane, actuated always by these and similar principles. In harmony with this view we have avoided all acrimonious controversy; we have kept free from all unnecessary harsh language; we have never descended into the arena of vituperation or slang. We expect in the future to be guided by these ideas and to use our own best endeavors on all suitable occasions to further the interests of the farm and the country and the world in this direction.

CAPITALISTS.—HARD NAMES.

We read in some papers and among them in the *Western Rural*, of Chicago, especially, bitter words against capitalists as a class, and very many hard names applied to them. The cause of that great body of workmen, comprising the largest part of humanity, is so dear to us that we cannot but regret the very intemperate methods of such writers, as compare every rich man with the "devil" and pronounce him "a tool" of this imaginary being. It is very unfortunate that at present no adequate laws are in existence to adjust those differences which are always liable to arise between the employer and the employed. Still, this being the case, is no reason for calling everyone who has obtained a little more money than his neighbor a "thief"

and a "robber"; or even to stigmatize him as a hard-hearted and avaracious tyrant. The great mistake of the workingman's friends while using such words is in the fact that the words do no good. They only serve to prejudice a large number of the people against their cause, who would otherwise sympathize with them. Those who are acquainted with the capitalists who employ large numbers of men, find them generally made of the same stuff as the rest of our humanity, subject to the same feelings and actuated by the same impulses. The workingmen are no less actuated by the desire of gain than the one who employs them; while the capitalist is just as readily influenced towards charity as any other class of men. It is the height of folly to ascribe all the selfishness in the world to the capitalist and monopolist and paint the poor, suffering workingman as the personification of all the virtues.

It is time that this whole subject of capital and labor should be looked upon without such heated and unreasonable feeling on the part of the employed. Those who employ them do so with the expectation of gain, as a matter of course. This is the spur to drive them into large enterprises, which require the work of many people. Without this spur great undertakings would be unknown and manufactures of every description would languish or cease to exist, except for individual use, and then only on the smallest possible scale. Unless spurred on by the expectation of gain, how many of the workingmen would be content to work even eight hours a day, especially if half that time chanced to be sufficient to supply the necessities of living? All are in the same boat so far as their selfishness and grasping after more of money, more of luxury and more of leisure are concerned. This being the case, it is not well for the workingman's cause to be so freely calling rich men by all manner of hard names, showering

curse upon them, threatening them with all manner of vengeful and wrathful evils. A much better method is to canvass dispassionately each case of hardship which may occur, and strive to find out the remedy. If bitter, antagonistic feelings are not aroused, the capitalist will cheerfully meet the workman and they can together find the solution of almost every problem which may arise. But if either party begins by calling the other a robber or a villain, it is not very probable that they will come to any very favorable understanding. Human nature is "very much the same" in the workingman or his employer, in the saint or the sinner, and if called by insulting names it will invariably rebel against the party using them.

Perhaps no more expressive contribution could be made to this general subject of capital and labor than the comparisons of prices of labor and the increase of capital during the past fifty or sixty years, which the present discussion has developed. It is shown from statistics of the Labor Bureau in England, that the increase of capital during fifty years has averaged only 15 per cent. a head, while the increase of the prices paid for labor has been 160 per cent. In this country the same general facts hold good also. The prices paid to laboringmen are 25 per cent. higher than in 1865, while all the things which they are forced to buy, to wear or eat, are at least 50 per cent. lower. Then the dwellings occupied by the laborers, the advantages of free schools, the much fewer hours of labor, all the particulars that add to his comfort place him in a far better condition than in any previous period of the world's history. These things all arise from the employment of capital in the grand enterprises that are characteristic of this present age. If by any mischievous blunder, capitalists are made to feel insecure in their investments, all this prosperity of the workman is sure to be reversed. We feel that a great deal

of caution should be used by the laboring-man in this direction.

The trials of the workingman are often very heavy. Of this no one can have the slightest doubt. Could they be lightened by a wise and just administration of the business of life, it would be the greatest blessing that could be bestowed upon our country. We look forward in the hope that it will be done. We will gladly hail every tendency towards bringing to the workingman greater enjoyment of the bounties of life, greater opportunities for recreation, greater blessings of health, education and social cheer. We hope even the intemperate zeal, which sees no higher method than the use of low and disgraceful terms towards others, may not stand permanently in the way of this good work. The cause should not be so jeopardized by its professed friends. When will it be realized that calm and dignified words carry much more weight than the largest accumulation of invectives.

OUR FOREIGN LETTER.

PARIS, April 30, 1886.

The Hippic Show, held annually at Paris, is under the auspices of the Jockey Club. It is intended to promote amelioration in the breed of horses in France. It is merely an auction mart under a different name, where dealers and livery men endeavor to exhibit the best "finds" they can collect, suited for the carriage and saddle. As a test of French races of amelioration in native breeds, the recent exhibition is *nil*. This object can only be attained in the regional or local shows, or, better still, by visiting the stables of acknowledged breeders. The Hippic Show has further a sort of amateur circus performances, where there are gentleman riders and a gentleman coachman displaying their skill in an arena before a full gathering of carriage-going-people.

Curiously enough, the Jockey Club, which boasts to cover with its aegis, horse-breeding amelioration in France, opposed the efforts to improve the race of Perche-

rons. It is not eighty years since this now famous breed originated; the date is shorter still since the ox was employed in work, in which the Percheron has superseded him. The ancestors of the Percheron are to be found in the draught horses of Britany, and the divers varieties of the Boulogne race the first cousins of the Flemish breed. Indisicious selections did the rest. Thus it is not as many perhaps imagine, a spontaneous product of soil and climate. It has been observed, "that with bran and an enclosure the Percheron can be invented anywhere." The joke will not turn out the strong, light horse trotting briskly and resisting fatigue, possessing solid tissues, sound bone and springy muscle.

The Dairy.

The tide by necessity has set in to develop butter industry. The point sought to be popularized is creaming the milk at a low temperature. Butter is the fatty part of the milk and enters to the extent of 85 per cent. into its composition. The rest is caseine, water and salts. Naturally, this percentage of butter will vary with the breed of the cow, climate or season, and food. Thus an Ayrshire will give more milk than an Alderney or Britany cow. Temperately humid, rather than hot and dry climates and season are more propitious for the secretion of milk; and nutritive feeds rather than washes for securing quality. If a cow be kept chiefly on brewers' and distillers' grains she will yield much milk, but the ingredients of the latter will be extracted from her system, hence, why cows so fed are skin and bone. The best butter feed are carrots. Richness can be secured by supplementing the ordinary rations with fat yielding food, as cotton seed meal. Some continental farmers give from $1\frac{1}{2}$ to 3 quarts of this meal daily to their cows all the year round, maintaining that the nearer the animals are kept on the lines intended for the butcher the more superior the butter will be. In Normandy, where extreme care is observed in butter dairies cows will often not be kept after their third calf.

The daily annual average milk from a cow varies from $4\frac{1}{2}$ to 8 quarts; ten quarts of milk will produce 1 lb. of butter and 4 lbs. of cheese. In some parts of France, 26 quarts of milk are required for one pound of butter, while half that quantity

in the case of a Jersey cow suffices for the same amount of butter. It is a maxim in French dairies that "young" cream will produce butter of the finest quality but less in quantity, while "older" cream gives the opposite results. Thus in Isigny, the farmers churn twice a week, and forward direct not to the Paris butter market, but to the wholesale dealer just as they consign direct to London and New York.

Churning has the effect of breaking the membrane of the little sacs in the milk or cream enclosing the fatty or butter ingredients, and these agglomerate like the rolling of a snow-ball. In Normandy, the hand-dash turns at the rate of 35 to 40 strokes per minute, when driven by steam or horse-power 50 revolutions are the rule. Isigny farmers prefer a temperature of 57 degrees, Fahrenheit at the time of putting the cream and milk in the churn—the temperature is raised 10 degrees by the churning—and 15 minutes in summer and often 60 in winter, are necessary before the butter can be taken off. The "Normandy" is the favorite churn, barrel shaped, 39 inches long and 32 in diameter, working on supports. The butter is kneaded both with hand and spatula. In summer the milk is creamed every 24 hours, and in winter every 48 hours. Naturally, the best butter will be obtained from pure cream, and next from whole milk. In the latter case a slight acidity is considered essential before churning.

The peculiar aroma, the delicate, nutty flavor, the melting in the mouth, the readily spreading under the knife, the absence of grittiness, the appetizing, natural golden shade color of the Calvados butter, is largely attributed to the varieties of aromatic plants in the pasture lands. But a good deal depends on the several processes, from the milking stage to the making up of the butter. So particular are several on the subject of having the vessels sweet, that these are scoured with nettles, then plunged into boiling water and dried over a red charcoal fire. The preservation of butter will depend on the more or less quantity of caseine contained therein—not more than 3 to 5 per cent. ought to exist in first-class butter. Caseine is a highly nitrogenous substance, easily fermenting and giving rise to several acids—hence, rancidness. The aim of salt is to correct

this tendency to ferment. The salt itself should be pure and as fine as possible; from a half to five per cent. of salt will be sufficient.

In France, butter for exportation is often melted in its jars and the water and caseine thrown up to the surface removed, but this destroys the freshness of the flavor, imparts the "dripping" taste. Equally objectionable is the weak solution of vinegar and tartaric acid. Better, though not excellent, is the compound of nitre and loaf sugar to two parts of pure salt mixed with the butter in the proportion of one ounce to the pound. Keeping the air from butter is also a means for securing its preservation. Farmers have remarked, that cows regularly supplied with salt in their rations, not only give a higher yield of milk, but the butter from the latter is less inclined to become rancid.

RESTORING WORN-OUT LAND.

Land that has been cultivated for a series of years with special grain crops will sooner or later lose its fertility, and in order to restore it quite an outlay is required of both time and money. It is not a difficult matter to secure good yields on worn-out soils provided special fertilizers be used, but when the soil reaches such a condition it does not pay to attempt to recuperate it and compel it to produce a crop at the same time. The greatest difficulty with farmers in such cases is that while they are willing to invest in fertilizers they hesitate at the loss of time and the products that would necessarily be expected from the land. And therefore, while the proper plan for recuperating the soil is to omit cropping it for a season the method is not generally adopted. The soil can be rested from labor as is done under the fallow system, but such a plan is too slow. Something should be added to it in order to assist the process of recuperation. As an impoverished soil is supposed to be too poor to produce anything, it is not an easy matter to resort to green manuring, but green manuring (the turning under of some special crop for that purpose) is the only lasting and permanent method of improvement.

As a beginning, lime, which is the cheapest fertilizer, should be used as a dressing in the fall, broadcasting it over the ground after ploughing it. Then rye should be thickly sown and the ground harrowed. There will be but little benefit derived from the lime before spring, its action being slow, nor will the rye make much progress, but when the spring opens the lime will have liberated sufficient nourishment from the soil to induce a moderate growth of the rye. As the rye may be ploughed under at any time, it should be turned under as soon as it shows signs of failure. A beginning will have been made, for the young, green rye will quickly decompose, while the lime will still continue to be beneficial. The rye may be followed by a mixture of oats and field peas, which will derive their nourishment from the lime and decaying rye, and a fair growth may be expected. As it is not necessary to mature the crop, it should also be turned under in time for a crop of buckwheat or millet, the former being preferable, which will make sufficient progress to thickly cover the ground by fall, when it should also be ploughed under, the land again broadcasted and re-seeded to rye. It will not require a large quantity of lime. Ten bushels of air-slacked lime per acre, in a fine condition, at each application, will be sufficient on a majority of soils.

The rye will make sufficient growth to be turned under when the season for planting corn arrives, and, as a year's time will have been lost in growing the manurial crops, the farmer will be desirous of securing something to recompense him for his loss. If, however, instead of so doing, he will hurdle sheep upon the land, thereby deriving the benefit of their droppings, and also turning under the ground, as fast as the hurdles are moved, other crops may be seeded down for the use of the sheep, and the land may be sown to wheat in the fall and clover in the spring. By thus devoting the first year to manurial crops and pasturing sheep with hurdles the second year, the land will be permanently restored to fertility, and may be rendered annually productive with good management, while the sheep will not only pay for the expense the second year, but give a profit as well. Considering the value imparted to the land in being rendered more fertile, and the in-

creased yield it will afford, the method is really economical, as the grain the third year will more than re-pay the loss of time and labor incurred in its restoration to fertility.

Pa.

R.

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FALLS CHURCH, VA., April 19, '86.

Editor Maryland Farmer:

I have received the February Number of the FARMER. I cannot resist the impulse to say at once what my impressions are with respect to its appearance and character. It is handsome in appearance and a model of typographical taste and excellence. The topics of the articles filling its pages are all live and important ones, and the treatment of their subject matter intelligent and largely correct. However, to some of the articles I must object regarding their conclusions.

I observe that many farmers' clubs are being organized. This is a good omen. No class can meet in clubs at stated periods for consideration and conference without receiving a progressive impulse, without obtaining steadily an increment of knowledge. But whilst every one and all gatherings of agriculturists for discussion of, or a comparison of opinions most always redound to the good of themselves, it must be seen and admitted that as mere detachments or isolated bodies from the multitude of their class the effect must necessarily be limited. What the farmers need is power, power such as can alone be obtained by numbers, by an aggregation of the entire class for common interest and justice.

There appears to be a question among farmers with reference to "making and applying manures." Farmers should have settled some things centuries ago and this one of manure and its application is one of them. Truly, as a whole they have settled nothing. Why? To an educated, thoughtful, observing man the answer is self-evident. The answer is, that the majority are not in their distinguishing qualities, what the man is to whom the answer is self-evident. Stable manure is the standard. That is the only complete manure. It will grow everything that adorns in the form of vegetable and plant life—God's green earth. Some, at least of its properties when in a condition to nourish vege-

tables, grains and grasses are volatile and in other ways are liable to waste. The proper application then is such as will prevent this waste and also as will place the manure where the roots of vegetation shall permeate it; not on the top of the ground. Land does not leach, and especially is this true in Maryland and Virginia. Providence shows to the farmer in the clearest manner in every rain storm, unless it be of the most moderate character that our land does not leach. Rapid rains run off, cutting away the soil and carrying it away. The land is not as porous as it should be for the good of the farmer. But, that broadcasting manure on the top of the ground to lie there is too clearly wasteful to be practiced by any reading, thinking, intelligent, observing farmer. See for authority on this application of manure question, Leibig, Boussingault, Johnston and Waring, if any one needs more than his own senses.

Wheat cannot be grown in Maryland and Virginia profitably for 98 cents per bushel, unless it be upon the principle that some of our peach growers seem to act on. If they get 15 to 20 cents per box, there is that much made. So it seems to be the idea with the cabbage growers; if they get 2 cents per head it is profit. Use of land, labor, manure, transportation to market does not seem to enter into the fruit growing and farming operations.

I cannot comprehend and render rational the philosophy of feeding up horses unless they are worked daily. If during the winter horses are idle, take off the grain mainly, that is to say, in the language of the old-time stage drivers and well posted farmers "*get the grain out of them.*" It is astonishing how quick after having the grain dropped off for two or three months in the winter, or turned out to pasture in the summer the same length of time, horses will when put on grain again come into condition again for business. With a couple of weeks good feed, with work enough for exercise, they can be put to work and they will be much better for it the ensuing season.

Old ground or that which has been cultivated the previous season may be plowed anytime during the fall or winter, if weather will permit with advantage. If sward ground is to be plowed in the fall, it

should be turned over early enough to have three or four weeks warm weather. It must have heat. It should not be plowed in the spring until the grass starts. Sward plowed just early enough to prepare it for planting makes the most satisfactory field for a crop of any on the farm.

Va.

L. S. A.

A STARTLING STATEMENT.

Before the Farmers' Institute, at Elmira, under the direction of Cornell University, Kendall Adams last week delivered an able address, entitled "A Plea for Scientific Agriculture." He said, among other things: "It is an interesting and even an impressive fact that our bountiful mother nature cannot be cheated or outwitted. In all the range of inorganic life we find no evidence of self-renewing or self-originating power. The ingenuity of man has never yet been able to construct any machines that can do more than transfer the energies of nature from one form to another. In the fertility of the soil nature seems to be a beneficent and all bountiful mother; but here, too, she places around us the same limiting conditions which are the all pervasive law of nature that the mother who feeds us requires in turn to be fed. As soon as we begin to withhold her supplies she ceases to nourish us; and in the end we are either left to starve or betake ourselves to other sources of support. What illustrations of this great law does the history of the world afford? In all the vast regions of the orient it may almost be said that the last sob of civilization has been hushed, and that everywhere there is nothing but barbarism and desolation. If we look into the causes of these results we shall find that, knowingly or ignorantly, a systematic attempt has been made to defraud nature of the operations of the law to which I have alluded. The trees have been ruthlessly swept away by the greed of man; evaporation has thus been diminished, and the amount of rain-fall has greatly declined, until it has, perhaps, ceased altogether. The continuous drafts made upon the soil have been met with no corresponding returns. And so in place of the rich soils that formerly were abundant throughout the East we now find naught but sterile waste. The sands have

drifted over the palaces of kings, and the fertile fields have been given over to the wanderers of the desert. Is this result necessary? The modern history of Europe shows that it is not. In England, France and Germany during the last fifty years fertility has even increased under the influence of scientific agriculture; while in England fifty years ago the average crop of wheat was only about 15 bushels per acre, it is now 20.9 bushels. In Germany a similar result has been reached. There is need of similar instruction in our own country, for we are everywhere confronted with the melancholy fact that the product per acre of our farms is steadily diminishing."

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Preparation of Soil.

The proper preparation of the soil to fit it for a crop involves a variety of processes, the most important of which are the loosening of the soil by plowing or digging, and the comminution or pulverizing of it to allow the roots easily to run through it and to take up their nutriment from it. Sub-soil plowing is a most necessary operation whenever the sub-soil is heavy and retentive. Vegetables and fruits, as much as the grain crops, require deep working of the soil. A moderately heavy soil that has been under-drained and sub-soiled and then carefully worked, is capable of producing the heaviest crops. A deep, rich soil is wonderfully favorable to a bank account. All the processes in the preparation of a piece of land for a crop require good tools, and in their purchase the aim should be to get the best. A good tool will quickly pay for itself, but a poor one is very expensive. A man must be well off who can afford to use poor tools. While a good plow will do better work than a poor one, it also enables the team to do more of it. Tools and implements should not only be of the best kinds, but they should be carefully kept in order and be clean and bright, and be stored in a proper place where they can always be found when wanted, without running across lots to find them where they were thrown when last used.—*Vick's Magazine*.

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An Immense Tree.

William T. Kelley, formerly of Caroline county, Md., has growing on a tract of land in Duval county, Fla., about fifteen miles from Jacksonville, one of the largest, if not the largest, hard-wood tree in America. He has a standing offer to any man who will cut it down in one day, to give him one hundred acres of land. A few years ago Mr. David Ogilvie, of Duval county, declared that he would cut it down in twelve hours or forfeit a \$250 horse, but after going to see it he refused, saying it would be a job for six men, instead of one. Mr. Ogilvie has cut down and logged off his forty large trees in a day, and is probably the best specimen of manhood to-day in the State of Florida, weighing 225 lbs. The big tree is a live oak, thirty-three feet in circumference and twenty-eight feet to the first limb, which is four feet in diameter, and is supposed to have been growing thousands of years, as the live oak is a slow grower when it becomes old. The rings are so close that it is almost impossible in an old tree to count its age. This tree, probably, was growing when Solomon ruled king over Israel.

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Good Neighbors.

Our frail humanity is so dependent upon our surroundings—we so need each other's help, that we cannot afford to be other than good neighbors. For however independent of our fellows we may imagine ourselves to be, there is sure to come a time when we crave human companionship and aid, and then it will be well for us to have sought "the good folks," who really and truly live "everywhere, if you only find them."—*Good Housekeeping*.

ICE IN SICKNESS.—Water cannot satisfy the thirst which attends cholera, dysentery, diarrhoea and some other forms of disease; drinking cold water seems to increase the thirst and induce other disagreeable sensations; but this thirst will be perfectly and pleasantly subdued by eating a comparatively small amount of ice, swallowing it in as large pieces as practicable and as much as is wanted.

ENSILAGE.—SILO.

The MARYLAND FARMER has reason to believe that it was the first Journal in this country to discuss this subject of Ensilage. A friend from France, informed us of the work of Goffart, and afterward translated a portion of his writings, which appeared in our Journal. It was then but the announcement of Goffart's discovery, and was treated as a mere theory, more than as a reality. But now we find it something real, and it is every year becoming a more indispensable part of every farm which carries any considerable amount of stock; while it is a very desirable adjunct to every place where dairying is of any importance. We feel only a just pride in having introduced this subject and advocated its trials.

The silo is no longer a mystery. Experiments have revealed a great many facts which have simplified the process of preserving the green fodder, until, with a little care, any Farmer may be able to use it and double or treble the amount of his stock without inconvenience.

It has also been demonstrated that no particular kind of fodder is necessary; but that any green crop which would be relished by the cattle as ordinary feed, will be more relished by them in the winter when taken from the silo and fed to them. Undoubtedly the crop of ensilage corn will give the most in weight per acre, and to this we should turn for the main substance with which to fill the silo. Much discussion has been had as to the value of the different kinds of corn for this purpose, and while the sweet corn is evidently of most value per ton as feed, yet the yield is so much less than some other kinds, that it can never stand in the first rank. The large Southern corn with its heavy stalks and vast amount of foliage gives so great a yield to the acre that it takes the lead. When this comes from the silo, it is relished by cattle as well as the others, and is in a

tender condition so that it can be consumed as thoroughly as the smallest stalks of sweet corn.

Weighing all the experiments which have been made, and the various experiences which have been given to the press, it would appear that the principal point is to pack the ensilage as thoroughly as possible, and place upon it as much weight as can be conveniently given to it, say from 300 to 400 pounds to the square foot. This is all that is necessary to make it a success.

The green crop is generally handled more easily if cut to a reasonably small size, but this is not absolutely necessary. Any crop, such as clover, peas, millet or grass can be used in the same manner and will make a good ensilage; yet it is advisable to cut it, because so much better to handle.

It has been customary to build silos mostly under ground; but this is by no means necessary. Many of the most successful silos have recently been built above ground, and advantage taken of a side-hill so that they can be filled and emptied without any great labor.

Many have questioned the expediency of growing such immense quantities of ensilage and have asserted that it would exhaust the fertility of the land. Others, however, who have raised many successive crops of ensilage corn from the same fields, assert that corn is not an exhaustive crop, and that it can be raised many times in succession with but very light manuring.

In a recent essay upon the silo, before the Farmers' Gathering, in the *Mass. Ploughman's* office, Mr. G. D. Forristall has summed up the experience of several years in the following well chosen sentences:

"Certain facts have been so well established as to need no further proof. The most prominent of them, concisely stated, are:

1. Silos may be made with any of the various building materials, and some very

crudely and cheaply constructed have been found to do good service.

2. Silos may be above-ground or underground, or partly both; they should be water-tight and preferably air-tight and frost proof, although these two points are not essential.

3. The situation, form and construction of the silo, and the arrangements for filling, covering and emptying should be largely governed by local conditions.

4. Several small silos, independent or connecting, are better than one large, and the depth should be considerably greater than the length, width or diameter.

5. Silos may be filled slowly or quickly, in all weathers: the silage produced will vary in condition and quality, but these variations of management do not very materially affect the result.

6. Any plant or vegetable product good for cattle food, when green or fresh, may be preserved as silage, in an edible and succulent condition, throughout the year for several years.

7. As a rule, all horses, mules, cattle, sheep, swine and poultry are fond of ensilage, if its material is ever such as eaten by them. Most farm animals prefer it to the best dry forage, and often prefer it to good roots.

8. The best time at which to cut any growing plant to make good ensilage is when the plant approaches maturity, and is beginning to decrease in the percentage of its water content.

9. The cost of preserving a given crop as ensilage does not materially differ from curing the same crop by drying, in a suitable season; but crops can be ensilaged and preserved in seasons when they would be lost if drying was attempted.

10. An acre of corn as ensilage will weigh four times as much as the same crop dried as fodder.

11. An acre of corn, field cured, stored in the most compact manner possible, will occupy a space ten times as great as if in the form of ensilage.

12. The chemistry of the silo is still much in the dark. The contents of any silo filled with crops from the same land, and apparently managed in the same way, year after year, will differ in condition and quality in different years. Knowledge of the subject is not yet accurate enough to

prescribe with certainty the procedure which will ensure the best ensilage. Yet any forage crop can be preserved in a moist, fresh form, substantially unimpaired as food, although there is generally a considerable loss in the carb-hydrate elements, and a partially compensating gain, both in the percentage of proteine and the increased digestibility of the fiber.

13. As food for cattle as well as other kinds of farm stock, ensilage forms a good and very cheap substitute for roots, and its condimental effects are especially apparent, but the usual ensilage crops fail to fill the place of the root crop in a judicious farm rotation.

14. In feeding, the best results follow a moderate ration of silage, rather than the entire substitution for dry, coarse fodder.

15. Ensilage, and especially good corn ensilage, when compared with dry corn fodder or with other feeding stuffs, produces results so satisfactory as to surprise the chemist, and which chemistry cannot explain.

16. A silo or two, well built, but not too large or too expensive, are convenient and economical on most farms to save crops, which at times might otherwise be lost, if not to preserve some crops specially grown for ensilage.

17. The extensive use of ensilage upon any farm is chiefly a question of convenience and economy, which local conditions must decide.

LIVE STOCK SANITARY APPOINTMENTS.

The Live Stock Sanitary Board appointed under a recent Act of the General Assembly for the stamping out of contagious diseases, organized on the 4th of May, by the election of Mr. Alex. Fulford, of Harford county, President, and Mr. T. Alex. Seth, of Baltimore county, Secretary, and have established an office at No. 28 St. Paul street, Baltimore.

This Board was constituted in the Farmers' interest for their protection and should receive their hearty co-operation and support. All suspicious cases of animal diseases should at once be reported to

said Board, who will send a veterinary officer to ascertain its character and if found to be contagious, slaughter will be made and the owner fully compensated.

This Act of the Legislature is a very important one, and the Board appointed by the Governor and the State Veterinarian are all reliable and competent men. We trust their prompt and energetic action, when their services are needed, will restore the confidence which has been seriously impaired from the lack of such an authoritative Board. This will encourage stock-growers to continue their trade in fine stock. We believe under the present arrangements pleuro-pneumonia and other contagious diseases will be thoroughly "stamped out."

LEVEL FIELDS.

In farming on a large scale, it is of course next to impossible to get all level land. There will be a hill here and a valley there, jutting into the fields and spoiling the shape, unless that too is included under the plow. Even on the level ground of the tide-water and the Midland Belt between Piedmont and Tidewater, this remark applies, for even here we have much rolling land.

Any good practical farmer, however, will admit, we think, that hillsides in a cultivated field are a first-class nuisance. If you put soil on them twenty times a year, twenty times perhaps it will get washed away, and the hill is left nude and does not pay in produce for the time spent by the plow in passing over it. This, to say nothing of the annoyance of having the crop above washed away, and the crop below covered in debris, is very vexatious to a tidy farmer, to whom these bare spots in a field are perfect "eye-sores."

Despite the preference not to have a field broken up into patches, it were much better to take the plow away from the hillsides and confine it to none but level grounds. After years of observation and experience, we are convinced it is far better to sow the hillsides down in orchard grass or clover, or get them set with wire or

Burmuda grass as speedily as possible; or else plant them in fruit trees or grape-vines, and mulch the land heavily with coarse litter to prevent washing.

By persistent efforts any hillside may be clothed with verdure of some sort, even though it be nothing more than weeds, and even weeds are more grateful to the eye than red clay or yellow sand. Where weeds will grow clover will grow, and this affords most excellent pasturage for bees and sheep. The hillsides may be made useful, if only you will keep the plow away.

Indeed, nature, always a better farmer than man, makes provision for the greatest diversity of crops, and by giving us hill, valley and plain, river, ocean, mountain, brook and lake, provides for a hundred useful products where man would have but one. To preserve his mathematical lines and figures, he sacrifices a host of advantages to the insatiate plow.

Such is not the proper mode. Clothe the hills in orchard trees or grass; build there your apiaries; make them ranges for the poultry, lambs, calves; take away the plow, and even though your fence puts to shame all regular lines, heed it not, but draw the plow around the hills and then keep the orchards where they should be—on the hills—and not on the level ground.

Do this and then spend your strength and means to make the level ground rich. Fill it full of vegetable matter and manure, and then to keep it there, let no water run off the land, but cause it all to settle through the soil and be carried off by the drainage from below. If necessary, to prevent the least washing anywhere, throw up strong beds with the plow to retain the water and keep it from carrying away the rich soil. Better have every field basin-shaped, holding every drop of water that falls than to suffer the loss of a single pound of rich earth. If the under-drainage is good, there will never be an excess of water long at a time. Provide for under-drainage, but prevent surface-drainage. Cultivate none but the level land.

Va.

B. W. J.

AN IOWA CATTLE GROWER has de-horned 125 cattle with no bad results, and regards it a great economy. He thinks that horns do \$1,000,000 damage annually in Iowa alone.

BORROWING.

In every neighborhood there is at least one family of borrowers. This family lacks everything, apparently, but cheek and wants. It borrows, or attempts to borrow (and when does it not succeed by some means?) everything, from baby clothes to the mowing machine. Groceries, kitchen utensils and farm implements of every description are needed by this family, and instead of going to those who have to sell it goes to those who have to lend.

Such a family is a nuisance. There are times when any family will be compelled to borrow; but these rarely occasional borrowers take good care of whatever they borrow and return it as soon as they are done with it. But not so the chronic borrower. He or she is shiftless and careless, else would not be a borrower. He is careless in the use of what he borrows; very likely breaks it, but never has it repaired. Nor does he return it, whole or broken. That would be contrary to his principles. If you want again what you have loaned, you must go after it, and probably will be compelled to find it somewhere in the weeds or mud. This borrower never cleans and shelters the spade or plow; and when you get it again, it is rusty and dull. It is not borrowed again until after you have made it clean and had it sharpened.

And, if they could only be made to realize it, these borrowers are a nuisance to themselves. The time they spend in going to borrow exceeds in value the cost of what would save them from borrowing. If they would buy what they need and expend in sensible labor the energy they employ in borrowing, they would soon be the richer, and would also be happier, if their happiness could be increased by gaining the respect of themselves and the neighbors.

Since it is no charity to gratify these chronic borrowers, and costly to you, they

should be steadily refused until they are compelled to purchase for themselves. If they can not be persuaded to quit tormenting and damaging you while injuring themselves, compel them to consult their own interests by getting for themselves all those articles of common daily use.

IT IS SAID

That tomato plants in melon hills drive away bugs.

That barley is the best feed for fattening geese.

That it costs as much to raise a weed as to raise a corn plant.

That young orchards are sometimes killed by crops of grain.

That a lump of sugar will start a balky mule.

That a spoonful of ginger is often a good tonic for milch cows.

That green manuring is the best for corn.

That all stock should be fenced in, and not out.

That foliage applications of plaster often pay better than guano.

That sturgeon oil is the best summer insecticide for stock.

That latent electricity is nature's life-giver.

That 'neglect' is the English for "chicken-cholera."

That iodine ointment is good to remove tumors and warts.

That low prices make rich farms.

That the MARYLAND FARMER is the best of Monthlies.

IN SETTING MILK FOR CREAM it should be borne in mind that the pans should not be covered, but remain open, in order that the air may have free access. Any particles of milk remaining in the pans from previous setting affect the new milk, and it is best to allow them to air out-of-doors also.

EDITORIAL BRIEFS.

STRAWBERRY MONTH.

June is the strawberry month, and no Farmer's table should be without this delicious fruit. To say nothing of the variety it adds to the meal, it is one of the most health-giving fruits that is grown. It should grace the board three times a day as long as it lasts. If not grown for market, still no Farmer should fail to provide strawberries for his home.

RESTING.

This article is not for those who are constitutionally tired, who seem to have been born with the insatiable desire of resting. We have placed it here for those who are ambitious to do all that is possible, and who are not accustomed to give themselves any quarter so long as they have before them any job unfinished. These need rest. Such are expending too much of the vitality needed for success in after life. A rest for these should be taken several times during each half day's work. Rest in the shade, and if the team is with them, it will not harm that to partake of the rest. When the call comes at eve to leave the field, just as much will have been accomplished. The resting is a blessing to both man and team.

TRYING NEW THINGS.

Every season a great many new and wonderful vegetables make their appearance in the catalogues and promise such magnificent results that the Farmer is tempted to try them extensively. He not only spends considerable money for the seed, but he spends considerable time and a large amount of space and valuable manure, often finding the whole amount wasted. New things should be tried, but tried on a very small scale. You can learn the lesson on a pound of potatoes as well as on a barrel; on a rod of peas as well as on an acre. Make trial on a small space and in the cheapest manner. If a success, another year may enlarge your crop; if a failure, another year you can try some other.

CONVENiences.

It is too often the case that most of the conveniences of the Farmers' homestead are gathered around his barn and cattle. Should not a goodly portion of this attention to conveniences be turned to the household department and the wives and daughters be benefitted by them? Have the arrangements, especially for kitchen work, the very best; have the pantry and dish closet and dining-room so arranged as

to save as many steps as possible; have a good wood box and see that it is kept well filled; arrange the water so that it may be in the house and handy for all purposes: have plenty of closets that clothes may be easily cared for, and the greatest of all conveniences is to have every male that comes into the house bring a kind word and an abundance of patience.

A COUNTRY HOME.

Nothing can be found more pleasantly adopted to our comfort and happiness than a country home in the spring time. The month of June seems particularly delightful with its wealth of young life, its growing crops, its sunshine and its beauty. In the outer world we can seek for nothing which has not been bountifully supplied. It only remains that we make the world within our homes equally harmonious and delightful. This can easily be accomplished, if we carry with us to our friends pleasant words, cheerful smiles and affectionate hearts. We make life beautiful without and within our homes by our own labor, brightened by the sunshine we cultivate in our own souls, and happy from the love we cherish day by day.

PREPARE TO COMPLAIN.

When the autumn comes let us be able to complain about something very different from usual. Let us complain because we have tilled the ground altogether too much; let us complain because we have destroyed all the weeds about the farm; let us complain because we have cleared away all the wrecks of trees, all the unsightly piles of stone, all the old rails and lumber, all the broken wheels and rubbish, which have hitherto ornamented our premises; let us complain because we have nothing about the house or barn, the orchard or the garden out of order. Prepare now, and during the coming summer for such complaining.

IT GIVES US PLEASURE to call the attention of our readers to the advertisement of the Great Atlantic and Pacific Tea Company, who have the reputation of being the largest dealers in teas and coffees in the U. S. The Company has at present in operation 200 stores, four of which are located in Baltimore; they guarantee all the goods they sell as strictly pure and prices way down. A visit to any of the Company's stores in Baltimore by intending purchasers will both interest and benefit consumers of these luxuries of the household.

LIVE STOCK REGISTER.

SHEEP AS SCAVENGERS.

The work which sheep do in ridding land of undesirable growths is generally underrated, and by many is not considered at all; yet there are few farms which would not be benefitted by the pasturing of sheep upon them, not only by reason of the fertility added to the soil, but because patches would be cleared of weeds, briars, or semi-worthless grasses. On the prairie lands of the Upper Mississippi Valley the Jimson or Jamestown weed grows so well that when it is once introduced upon a farm the only way to eradicate it is to stock the farm with sheep. By reason of its odor, taste and acrid qualities, it is, perhaps, the most forbidding of all weeds. No other farm animals will touch it; yet the sheep will keep it so well eaten down that it has no chance to mature seeds, and is soon killed out. The same thing is true of the cocklebur and the velvet-leaf. The former is the great pest of the farmers of Illinois and adjoining States, and the latter is the most tenacious of all growths upon a very productive, friable soil. The sheep is the only farm animal which will eat either of these weeds; but it will keep them eaten down so closely that they cannot mature seeds and will in time die out. Pasturing with sheep is the only practicable way of getting rid of these weeds; for if the land is in corn, for instance, the weeds will spring up after cultivation has ended, and the farmer cannot afford to hire men or boys to go through the corn each week and cut out or pull out the weeds, but if he turns sheep into the corn they will not damage it, but will eat down the weeds, not missing one, and these weeds they convert into wool and mutton, and also manure the land. In the East the sheep are used not only to rid land of weeds and herbs, but of briars and shrubs; and as in that section briars, shrubs and woody vines are as troublesome as weeds are to the farmer in the Mississippi and Ohio valleys, their work as scavengers for the Eastern farmers is a valuable one. Sheep are important aids in substituting blue grass for herbs and vines on timbered lands; and if there are a few bunches of blue grass scattered over the bare places,

the sheep, unaided, will in a few years have the entire ground nicely seeded down in blue grass. They will keep the herbs and vines eaten down until they are killed out; and the blue grass will always be ready to take the place of these other growths, especially as the ground has been enriched by the droppings of the sheep. The efficiency of sheep as aids in bringing up poor land is almost altogether owing to their proficiency as scavengers. Such land bears but an unpalatable growth, such as cattle swine or horses will not thrive upon, but which the sheep will eat readily enough if nothing better is at hand. And while they are cleaning the land of vines, briars, herbs, etc., they are also making it capable of producing a better growth, for their manure is added to the ground. It is a matter to be remembered that while in proportion to the amount of food consumed the manure of the sheep is not more valuable than the manure of other farm animals, yet when they are acting as scavengers and the quality of their food is considered, their manure has a greater comparative value; and their way of depositing it—distributed over the land—gives it a greater value in enriching land than if it was deposited in heaps, like the manure of cattle and horses, or in particular places, as is the manure of swine.

Sheep of some breeds are far better scavengers than are sheep of other breeds. The Merinos are the best for cleansing land. They are natural foragers, indifferent to exposure, and care but little, apparently, for the quality of their food. This comes from the conditions of their life for many centuries; their characteristics have been developed, fixed and perpetuated by their surroundings, and in nothing is this better exhibited than in their enterprise as foragers and little care for the palatableness of their pasturage. In their earliest home, the East, they had to look out for themselves, and the herbage upon which they had to subsist was neither succulent nor highly nutritious. When they were transported to Spain the same conditions of life prevailed. Here they had to rough it and shift for themselves, as they had done for centuries in the East; and their food lacked both abundance and palatableness. Their indifference to surroundings and the quality of their food is

therefore a characteristic strongly developed and firmly fixed; and it makes them the best for the ranges—good foragers and equal to exposure—as well as the best for cleansing foul land, hunting for anything that may be eaten, no matter how difficult it is to obtain it. The English breeds are not such enterprising foragers and they are more particular about the quality of their food. They will do very good work in cleansing land, but for this they are not the equals of the Merinos. A Merino will thrive upon pasture that an English sheep will make no gain upon; and it is rarely profitable to keep them even to clean up land, when they are not making a gain. If the Merinos are thought too small, as many think they are, cross them with some English breed, say the Shropshiredown, and the desired size will be obtained, while the foraging propensity and the efficiency as scavengers will be very little, if any, reduced. These characteristics of the Merinos are, as already noted, so strongly marked and firmly fixed that they are the last to be lost, wholly or in part, by crossing with other breeds. If the large English breeds are used the gain in size will be much greater than the loss in the enterprising, hardy qualities of the Merinos.—

John M. Stahl, in *Texas Farm and Ranch*.

THE PROFITS OF SHEEP.

George C. Hammond, of Barnard, Vt., gives his experience as follows:

"For nearly half a century I have owned or had the care of farm stock. This stock has been the common kind usually kept by farmers, not registered, high-blood stock. I have received better returns and made more from keeping sheep than from any other kind of stock, notwithstanding the low price paid for wool. I have kept most of the different breeds of sheep. First the old native, then the Saxony, shearing about two pounds of washed wool; then the Merino, shearing with ordinary keeping, six and seven pounds, and the Cotswold, a light shearer considering its size, and lastly the Southdown. The fleece of the Southdown is less oily than the Merino, of medium length and classed as medium wool. I have seen some full-bloods of this kind from Hon. Frederick Billings' flocks that were very fine animals. The few I have kept have been grade Southdowns.

With wool at fifty cents a pound, the Merino is the most profitable sheep for the farmer, but with present prices of mutton and wool, the Southdown is more profitable. The Southdown is a healthier sheep than the Cotswold and nearly as hardy as the Merino. They raise better lambs than any other sheep. They are very fond of their young and give plenty of milk. Grade Southdown lambs will weigh sixty and seventy pounds each when three and four months old. These lambs at this age will sell for three and four dollars each for mutton. A farmer would realize, including wool, some four or five dollars from each one, which is more profitable than keeping cows with butter at twelve and thirteen cents a pound. The reason Southdown sheep are not sought after by farmers is on account of the lightness of the fleece, but considering their other good qualities they are the best sheep, especially for small farmers like myself. They come to maturity young. When only one year old they frequently raise good lambs. When I first kept a few of these sheep I was not well satisfied with them, but by keeping them I became convinced of their good qualities."

SUNLIGHT IN STABLES.

We tried an experiment some six years since to test the effect of absence of light upon a calf says the *Live Stock Journal*. We had two deep red calves of the same age (60 days), one weighing 180 pounds and the other 18½ pounds. The latter we placed in a dark room with a trough that could be filled by a spout through the partition. The other was confined in the same space, but in full light, and both were fed exactly alike for the next three months. The object was to test the effect of light upon such a growing animal. At the end of the time, the one in the light weighed 430 pounds, and the one in the dark weighed 369 pounds, and its color was a very pale, dirty red. Its eyes were so much affected when admitted to the light that it kept them closed most of the time the first week or two. The two calves were kept on together, but the one from the dark room never fully recovered from this three months of darkness. It never recovered its bright red color, although the

color improved. Any one who noted these two calves during this experiment would never after, doubt the impolicy of a dark stable. Sunlight is indispensable to healthy vegetable and animal life. Every farmer sees his cat and dog select a belt of sunlight to lie and bask in; and if he will watch his cattle when turned out he will find them seeking at once the sunny side of the barnyard. And with all these indications before his eyes, still the farmer keeps his cattle in dark stables, much to their discomfort and his pecuniary loss. We do not, of course, include all farmers in this statement, for a small minority fully understand the importance of sunlight in stables, and make ample provision for its introduction.

THE MUSK-MELON.

No market gardener ever forgets to plant a good size patch of musk-melons for his trade. It pays him better, very often, than the watermelon, and there are many consumers who prefer it to the latter.

The musk-melon vine is a vigorous grower, takes up comparatively little space, and is very prolific. After the earlier vines are nearly spent, more seed may be planted to supply the late demand for pickles and mangoes, for, like the cucumber, it makes a fine green pickle. It may be grown among the corn, cotton, tobacco or in the peanut field, and will produce in this way an abundant supply of fruit, both ripe and green. It will grow almost anywhere, in sun or shade, and may be trained on a trellis or a small bush stuck into the ground near it. Managed in this way, it becomes an ornamental plant. The smaller varieties suit best for this, as they do also for pickles. The larger kinds need room and good cultivation to produce a profitable crop of ripe fruit.

But the farmer, as well as the market gardener, might derive considerable benefit from the musk-melon, as food for his milch cows and pigs. The ripe melons are greedily eaten by these animals, and they are certainly quite nutritious feed. A daily ration of a peck of musk-melons and a gallon of meal through the months of August and September, will keep a cow in fine condition and cause her to yield a fine flow of sweet, rich milk, at a season when

other cows are falling off rapidly.

Poultry are very fond of the seed and indeed of the melon as well, and a few ought to be put within their reach every day or two for them to peck. It will supply the place of other fruit to them, and is better for them than acid fruits.

June is the proper time for planting the seed for the late crop and they may be put about in the missing hills of most any other crop, and, with very little care will produce abundantly. Plant them in all the vacant ground.

Va.

B. W. J.

SALT FOR FARM ANIMALS.

Salt is essential to the thrift of animals. It assists in digestion; or, perhaps more properly speaking, it prevents indigestion. Some foods are apt to ferment in the stomach unless rapidly digested; and if the organs of digestion are not vigorous, colic is the result. Salt will often prevent this. Hence animals should have salt continually before them, that they may get it whenever they choose. If kept always within reach, no farm animal, not even the hog, will eat too much.

Salt is necessary to the thrift of animals because half the saline matter of the blood—seventy-five per cent.—is common salt. Part of this is lost every day through the skin and kidneys. Hence it is necessary that animals be given salt to take the place of that lost from the blood. The blood must lose in quality and quantity if no salt is given to the animal.

Third, sodium—one of the two elements of salt—is a special and indispensable constituent of the bile. The importance of the function of the bile is so well understood that it is only necessary to state that unless the animal is given salt the bile can not perform its offices, to convince any one that farm animals should be given salt. Because salt is an indispensable part of the bile, it may be said to be an indispensable aid to digestion.

Fourth, sodium is an indispensable element of the cartilages. If salt be not given the cartilages can not be built up so fast as they naturally waste away. As the cartilages are the connecting links, as it were, between the motor muscles and the parts to be moved, their health and vigor is essential to the thrift of the animal.

As before stated, salt should be before farm animals at all times. Have a little box made in one corner of the feed-box and in this little box keep salt for the work horses. For cattle and sheep in the fields keep salt in a trough, raised from the ground and with a roof over it. Hogs are best salted from a box set on the ground and filled with salt and wood ashes mixed. If cracks are made in the box near the bottom, the hogs will work out all of the mixture they want, while none will be wasted.

The Largest Two-Year-Old Milk and Butter Records.

The Holstein-Friesian heifer, "Albino" 2d, H. H. B., 3500, owned by Smiths, Powell & Lamb, Lakeside Stock Farm, Syracuse, N. Y., dropped her first calf April 7th, 1885, being then two years, one month and twenty-three days old.

Her record commenced on the morning of April 11th, 1885 and ended on the evening of 10th, 1886, just 365 days. She gave during that time 18,366 lbs., 2 ozs. of milk. At the expiration of the year her daily yield was higher than when her record commenced, so that her record for exactly one year, commencing on the morning of May 5th, 1885 and closing on the evening of May 4th, 1886, was 18,462 lbs., 1 oz., thus surpassing by 715 lbs., 15 ozs. the famous two-year-old record of "Aaggie" 2d, which is 17,746 lbs., 2 ozs., and she was some months older than "Albino" 2d, when she commenced her record.

To the Editor of the Maryland Farmer.

ANIMALS MODIFIED BY SOIL AND CLIMATE.

We know that plants are modified by soil and climate. The members of the same variety are often widely different when separated by a hundred miles. Plants which do well in one locality do not do well when taken to another. Their composition varies with the composition of the soil in which they grow. Now as animals are subjected to the same climatic influences that the plants are, and as the plants are the food of the animals, may not animals of the same breed differ in characteristics and profitableness with the locality? That an affirmative answer should be given to this question, a single illustration will suffice to show. People living in limestone regions, notably East Tennessee and some other localities in this country, are tall, bony, angular. We know that this proceeds from the large amount of carbonate of lime contained in their food and drink. Grains and vegetables grown on a limestone soil contain a larger per cent. of lime than if grown on a soil containing little lime; and the water to be found in a limestone country is strongly impregnated with carbonate of lime. As this carbonate is the most important element of bone, much of it in the food and drink produces such a great bone development that the person is unusually tall and gaunt. The same causes would have the same effect upon the lower, graminivorous animals. A smooth Shorthorn calf taken from Illinois to Tennessee would become more bony and rough. We should expect animals of the same breed to differ in different sections of the country. It is also certain that a cow will give more and better milk in some localities than in others because the herbage is by its composition to some extent dependent upon the soil, better filled to the production of milk.

This matter might be pursued much farther, but enough has been written from which to deduce some practical propositions: A breed which is justly the most popular in one locality may not be the best for another locality, and not because of any fault of its own. A breeder may send a good animal out and the purchaser be dissatisfied, because the animal does not de-

velop, and yet neither the animal nor the seller is at fault. Second, because a breed is the best for some other locality, it does not of necessity follow that it is the best for your locality. You must experiment to determine this point. This applies with especial force to dairy animals. Third, do not engage in any branch of stock-raising unless you have better reason to believe it will be profitable to you than the fact that it is profitable in some other State. Be sure the soil and climate of your locality favors the enterprise. Fourth, do not disbelieve reports of the performance of a breed elsewhere, simply because that breed would not do so well in your locality. The soil and climate may be more favorable to it in the former locality.

III.

J. M. S.

ROOT CROPS FOR FARM STOCK.

BY PETER HENDERSON.

While "mangels" and other roots for stock feeding have been largely cultivated in Europe for the past fifty years, it is surprising how little it is yet done here, particularly when we know how well our soil and climate are, in most sections, adapted to the purpose, and how great are our necessities, particularly in those States where the long, dry summers diminish the crop of hay and other fodder plants. The most important root crop for stock is the mangel-wurzel, which, I believe, can be grown and matured in any good soil in any State in the Union. As with all root crops, a loose, friable soil, with a sandy or gravelly sub-soil, is better adapted to it than a stiff soil with a clayey sub-soil. All root crops require deep culture. The soil should always be plowed to the depth of ten inches, and if it can be done, it will pay well to let the sub-soil plow follow in the wake of the other, and stir the sub-soil ten inches more, making a loosened depth of twenty inches.

In many of our deep, rich, new soils an excellent crop of mangels or other roots can be grown without manure; but when necessary to use it, nothing is better than well-rotted stable manure, composted with as much muck or turf from road-sides, spread evenly over the surface before plowing, at the rate of from six to twelve tons

per acre. In the absence of stable manure, bone dust, superphosphate or guano should be applied, at the rate of from 300 to 500 pounds per acre; but all such concentrated fertilizers should be sown on the surface after plowing, and harrowed in, until thoroughly mixed with the soil. Before sowing, the ground should be smoothed as evenly as possible with the back of the harrow, to present a smooth and level surface for the reception of the seed.

The distance apart between the rows for mangels will vary with the character of the soil. In light, sandy soils, the rows should be twenty-four inches apart with nine inches between the plants; but in strong, rich, deep soils the rows should be thirty inches apart and twelve inches between the plants. This is what is termed the "flat culture."

Turnip Culture.

What has been said on the modes of culture for mangels may be applied to turnip culture, except as to the time of sowing. The Swedish or Ruta Baga varieties of turnip should be sown, in this latitude, from May 25th to June 25th, and the Yellow Aberdeen or strap-leaved kinds, from July 1st to the middle of August. When sown at these dates, the distance apart may be the same as for mangels, but both of the classes may be sown a month later; that is, the Ruta Baga may be sown from June 25th to July 25th, and the strap-leaved kinds from the middle of August to the middle of September; but when sown thus late they should be both between rows and between plants, one-third closer. The varieties that I find best are "American Ruta Baga" and "Purple-top Ruta Baga;" of the strap-leaved kinds, "Red-top Strap-leaved" and "Yellow Aberdeen." Mr. Crozier's estimate of the value of Ruta Bagas as compared with hay (at \$15 per ton,) is \$5 per ton; average crop, 25 tons per acre, or \$125. Purple-top Strap-leaved or Yellow Aberdeen Turnips he estimates at \$3.50 per ton; average crop, 35 tons per acre, or \$122.50. Estimating the expense of culture at half the gross value, we have still a large margin in favor of the crop; besides, the strap-leaved turnips can be sown after barley, oats or rye.

Carrots.

Carrots may properly come under the head of "Root Crops for Stock," though mainly grown for horses; but even for horses, Mr. Crozier says that he considers them far inferior to Ruta Baga Turnips. This is in opposition to the received notion, but we know that public opinion in matters of this sort is often wrong, and when we consider the marked success of Mr. Crozier as a raiser of both horses and cattle, his opinion in this matter is entitled to consideration.

The land for carrots should be prepared exactly as for mangels. It must be deeply plowed, harrowed and thoroughly pulverized, and whatever kind of fertilizing material is used, should be thoroughly mixed with the soil to a depth of at least ten inches. The same quantity and kind of fertilizers should be used as recommended for the flat culture of mangels, though in new lands or lands on which corn has been grown after sod, enough of the fertilizing material will usually be left in the soil to mature a good crop of carrots without any manure, provided the soil is deep and in good condition. I once grew twenty tons of carrots per acre on land in this condition without using a particle of manure. Carrots should be sown from the 1st to the 30th of May, and when sown by a seed drill, about four pounds of seed to the acre are required. The rows should be two feet distant, and the plants thinned out to five or six inches apart. An average crop is fifteen tons, of the "Long Orange" variety, to the acre, and the present price averages \$15 per ton in the New York market. The "White" or "Yellow Belgian Carrots" would give one-third more weight, but the quality is inferior and the price correspondingly lower.

SLOBBERING AND ITS CURE.

The frequent slobbering of horses at this season is variously accounted for. We have heard it attributed to the second growth clover, to the spider's web on the herbage, to lobelia, St. John's wort and other plants, but never yet to pennyroyal. But having occasion to make use of a neighbor's pasture for a few nights for our horses, we found them slobbering profusely from the effects of the pennyroyal which grew

abundantly in the field. The cows which grazed in the field were also troubled with profuse salivation. We have had previous knowledge that lobelia and St. John's wort would produce the same trouble, and now are sure that pennyroyal may be added to the list. But we doubt very much that second growth clover will cause it; indeed, we have good reasons to know that it does not in some cases. The slobbering of horses and cows is caused by the irritating effect upon the salivary glands, of the strong essential oil of the plants which produce it. If one will chew some lobelia, St. John's wort or pennyroyal, he will find the salivary glands to be excited in this manner. The effect is removed by eating any dry substance, as oatmeal, middlings or cornmeal, and the best remedy for it is to give any animal which is suffering from the salivation, a feed of dry meal or middlings; this will put a stop to it at once. The waste of saliva is exceedingly weakening to a horse, for saliva is not mere water, but contains a large quantity of potash, soda, lime, acid, phosphoric acid, and organic matter, so that it approaches very closely in character to blood.—*New York Times.*

A PRECOCIOUS HEIFER.—An Alderney heifer, only fourteen months old, belonging to Mrs. Dr. M. L. Jarrett, of Jarrettsville, is the happy mother of a calf that is now three or four weeks old. The age of the heifer is well attested, and the case is somewhat remarkable. The heifer is as large as an ordinary cow.—*Belair (Md.) Egis.*

The *Maryland Farmer* comes to us for May looking as bright as a daisy. It is the oldest agricultural journal in Maryland, and for ten years was the only one. Its cost is so trifling that Brother Whitman ought to have every farmer's name in the State on his list.—*Centreville Whig.*

A GOOD FARMER claims that potatoes planted on rich, mucky land (reclaimed swamp) yield large crops, and are not troubled by the potato bug, while his neighbors, planting on sandy soils, raise few potatoes; and the plants are badly attacked by beetle.

POULTRY HOUSE.

Poultry for June.

This is the best month in which to set hens with a prospect of profit. The very hot months are unfavorable to both mother and brood. Care must be taken to keep everything around the nests well protected from vermin, and to provide for the small chicks plenty of shade, so that they may escape, if they choose to do so, the constant exposure to the direct rays of the sun. Their feed should be frequently renewed, a small portion at a time, so kept, that it will not become sour before being eaten up; and their water should be clean and cold, renewed at least as often as they are fed. The growing chicks should have as much range as possible, and have plenty of broken bone with their food. Their roosting sheds must be kept clean.

French System of Marketing Fowls.

The French pack their fowls with great care. They are well fattened and dry-picked, the wings are turned under the backs, the thighs shoved up under the skin of the body and the ends of the drum-sticks tied to the tail-piece. Then the hand is placed upon the breast-bone and steadily pressed downward until the ribs crack, and the breast settles down perhaps an inch, and a bandage is wound tightly around the fowl to keep it so until cold and stiff. Besides the neck is often crowded back under the skin of the breast and tied there. This gives the fowl an unnaturally plump appearance which is mildly deceptive, but very attractive, and if the practice were usual, no one would be deceived by it. When thus "formed" and cold, the birds are unwrapped and laid in trays adapted to the height of the fowls when thus placed. All of one size are packed together, side by side, on their backs, and upon a layer of clean, bright straw.

The trays, which are very light, are packed in boxes for shipment, with straw between them, and when exposed in the market present a very beautiful appear-

ance. When the necks are not crowded up into the skin, the heads are tucked up uniformly under one wing—say the left one. Then the heads all show. Capons are picked with the neck hackle and the long tail feathers left on to show that they are what they pretend to be. In all cases we believe the feet are washed, cleaned and left on. The cooks make use of the legs for soup and the combs for decoration, and probably make some use of the heads, for they waste nothing whatever.—*American Agriculturist.*

Skimmed Milk for Hens.

The editor of the *Poultry World*, finding that a neighbor, whom he had furnished with pullets, had beaten him in eggs, inquired into the cause, and gives the following explanation. To this we may add that any kind of sour milk thickened with bran, is very excellent food for all kinds of poultry.

"They commenced laying in October and have been at it ever since, to the astonishment, if not the envy of the neighbors of the fortunate owner, who has been selling eggs for the past four months for forty-five cents per dozen and upward. Not one particle of meat or scrap is given, and but the veriest trifle of vegetable food is fed in the shape of a few boiled potatoes about once a week. An abundance of grain is allowed of various sorts, ground and unground, but never cooked, and plenty of unburnt oystee shell pounded, are at all times accessible. They have a supply of skimmed milk every day, so that they can help themselves to what they want, no other drink being provided. Skimmed milk and the white of an egg are very much alike, though the cream has been separated, undoubtedly the full allowance of Indian corn supplies the oily constituents of the yolk. Some farmers think they can not afford to give milk to hens, but must save it for the pigs. But if skimmed milk is worth 1½ cents per quart to feed to swine, as some claim, it is worth 3 cents for poultry, if, by its use, winter eggs can be obtained and sold at high prices."

Subscribe to the MARYLAND FARMER, only \$1.00 per year with a premium.

THE JOHNSON MANURE SPREADER.

The cut below represents the manure spreader described in the following letter by PATUXENT PLANTER, and which we copy from *Baltimore Evening News*. We welcome this new invention to the Farmers of Maryland. It seems to be a valuable implement, and well adapted to their wants. See advertisement in this number.

most skilled sower. Hence, in company with some few practical farmers, among whom were Messrs. Herman, Doll, Rice, Lee, Merryman, F. W. Whitman and others, I witnessed the

Test of the Johnson Manure Spreader,

the newest invention of the kind, on the 15th of April, 1886, on the farm of Mr. D. H. Rice, at Cowpen station, on the Maryland Central R. R., north of Towson. It was the severest test a machine ever underwent, and in spite of difficulties did its work well. I at least was satisfied that it, as a manure spreader, was equal to any I



Mr. Editor :

I confess I have for a long time looked to the manure pulverizer and spreader as one of the best and most economical adjuncts to farming, which, when perfected, would be not only a great labor-saving machine, but of incalculable benefit to the whole rural population, exceeding even the wonderful mowers and reapers of the present day. Manure is rendered more valuable by such distribution, but lime, plaster, ashes, &c., are more easily and less incommodiously handled, better scattered, and more effectively than by the hand of the

had seen. It, as I have said, had a hard trial. The ground was a steep hillside, deeply ploughed and full of small rocks and stones, unharrowed, mules and driver unused to such machinery, with a director—evidently not an expert, but who seemed to know no more of the machine than any intelligent farmer present who had never before seen such a machine—yet such was the test, with the box filled with coarse, lumpy, half-rotted, soggy manure; yet under these unfavorable circumstances the machine acted well as a manure spreader. How much better it could have done under

favorable circumstances this deponent sayeth not, but it must be admitted by all that its performance could have been greatly advanced. Therefore, I left under the impression that it was equal at least, if not better than any of its predecessors as a manure pulverizer and spreader I have seen heretofore. This is not its only advantage. If, as has been claimed for it, that it can be adapted to any ordinary farm wagon, it has an advantage over every other machine of like character in its value and *cheapness* to the mass of farmers who can afford to pay \$75 for such a valuable labor-saver, yet could ill-afford to pay, for the running gear of such a one, to be used only perhaps twice a year. If it proves to be, as the inventors say, and I have no reason to doubt it, that it is the only manure spreader made which can be attached to the running gear of any ordinary farm wagon, it must, owing to this, become popular over all its competitors. For its low price, lightness of draft, strength and simplicity in construction, it is in my humble opinion highly commendable to the consideration of every farmer who studies economy.

PATUXENT PLANTER.

FARM CROPS.

What particular course the farmer should pursue in the line of cropping is a subject that often engages his attention. The end aimed at by most farmers is the obtaining of the best results possible. In the nature of things farmers are governed to a considerable degree by circumstances. The demand for farm products is one circumstance that plays an important part; thus, if the demand for horse consumption and exportation in the matter of corn amounted to just 2,000,000 bushels, it would hardly be best for farmers to grow 20,000,000 although being of the non-perishable class, it would be more reasonable than if potatoes or some perishable crop. There must be a demand before there is any encouragement for production. It is only a comparatively few years ago that there was no demand in this country for tomatoes; but a taste for them was created and with that came a demand that has since grown to be enormous. Some twenty-five years or more ago there was no demand in New England for the wild huckleberry growing upon the

hillsides, but upon introducing them upon the market, a demand was created that has since grown to an extent of being a means of aiding many poor children who gather that kind of fruit.

In all directions of demand of the products of labor there should be an ample supply, but the trouble comes from an over-supply.

When there is over-production the competition becomes greater, prices decline, business becomes dull, wages diminish and laborers become dissatisfied. This is always a cause of labor troubles.

With an active demand for any kind of production, labor to produce will be in demand at satisfactory prices and there will be prosperity.

This rule applies with great force to farming operations; with a demand that is urgent and active, for corn, wheat, oats, pork, beef, etc. farmers will be active, will employ labor and will prosper in the employment of such labor; but on the other hand, suppose that from an over-production there is depression in the market, if by the employment of labor the surplus is greatly increased, then the condition of things is made still worse.

The question of political economy enters very largely into all departments of labor, and is one that is likely to be studied more closely in the future than it has been in the past. And with farmers it is becoming more and more evident that there must be as great diversity as possible in the line of production. With the present market uncertainties it is not safe to place dependence upon any one or two crops.

In the Western States farming on a large scale may be profitable, but in the East that day has gone by, even upon the larger farms. In New England the proprietors of the small farms feel that if by growing a diversity of crops producing a little beef, pork, etc., they can support their families pay their taxes and live in the enjoyment of a little comfort, they are doing well. And taking into account the difference in mode of living from a century ago, when the mode of dress, on all, compared with the mere primitive times, farmers of to-day are doing well indeed.

Conn.

WM. H. YEOMANS.

RAISING POTATOES UNDER
STRAW.

Farmer Scott, of Kentucky, writing to an exchange on the subject of raising potatoes under straw, gives certainly some indubitable proofs in favor of this method, not only for potatoes, but for tomatoes, melons, cucumbers, etc. Concerning his own experience, he says:

At one time, after covering a large potato patch, the colored assistant exclaimed, "Boss, heah is a panful taters left. What's I gwine to do wid 'em?" He was told to drop them where the machine horses had pressed the ground very hard, while threshing grain. The earth there was not plowed—(could not be.) The potatoes were covered like the rest. When fall arrived the black man looked for the result, and said to the "boss," "I s'pose you'll gib me dem taters in de hoss tracks?" "Yes, all right!" The man uncovered the place, and got over six bushels of the best, largest and finest potatoes ever grown in Bracken county, Kentucky.

I once raised a large patch of tomatoes. After they were well worked I took straw and covered the ground completely six inches deep. The vines dropped over on the straw. No weeds ever came up after that. Tomatoes to sell, trade, give away, was the result, after canning more than we ever had before.

Many years ago I was visiting a friend in Missouri—a farmer. The elder son contemplated a watermelon patch. He prepared one near the stable-yard. After the vines were up, just ready to run, he covered the ground all over and close around the vines with straw. In a few days the vines dropped and ran around in every direction. The longest vines were pinched off to prevent them invading the next neighbor's field. The young man also got some good earth, and placed it in a low spot on top of an old stack left over from the previous season. There he made a hill and covered it with straw. From that hill he pulled a melon which received a premium at the fair in the early fall. I sojourned at the residence, and we ate of the luscious melons nearly two months.

I have raised pickle cucumbers the same as tomatoes with straw.

POTATO POINTS.

Potatoes do well on corn land that has been manured for the corn crop. Good sod land can also be used. A deep, mellow seed bed should be secured by deep ploughing and thorough pulverizing. Manure and moisture are essentials. Old stable manure can be ploughed in. Some of the best crops are raised with commercial fertilizers.

Plant in drills or furrows, from four to six inches deep, according to the soil, light sandy soils deeper, heavier soils more shallow. Drop the sets and cover them with a couple of inches of soil, and then sow the fertilizer in the furrow, and cover in the rest of the soil.

Go over the field with a common harrow, running lengthwise of the rows, just before the plants push their noses through, and thus destroy all the weeds; afterwards cultivate flat through the season, using only the common cultivator.

One of the best ways to use stable manure for a potato crop is to plow it in in the fall.

Planting whole potatoes gives the best yield, according to the trials of the New York Experiment Station; half tubers are next best; quarter tubers next; single eyes yield least. Trials made at the Rural New Yorker grounds favor cutting to two eyes; other trials correspond with both of these results. The best way is not yet known.

Paris green or London Purple to destroy the potato bug is more economically applied with plaster or ground gypsum than with water, and the results are better. Mix one part of poison with one hundred parts, by weight, of plaster. Too much of the poison injures the foliage. If sufficient care is used in the thorough mixture of the substance, Paris Green can be used in the proportion of 1 to 150.—*Vick.*

IN BUYING MEAL do not put it into barrels and let it heat and spoil, as newly ground meal is very apt to do. If it is not spread, run a broom handle into it every few inches and let it touch the bottom of the barrel. This will leave chimneys or vents through which the heat will escape and leave the feed unheated.

PUMPKINS AMONG CORN.

In our hill towns, where stone and a hard soil to till exists, the good old fashion of planting pumpkin-seed in the corn-field still exists; but where larger fields are cultivated on soil easier to be tilled with the improved implements of culture the practice is mostly discontinued, from the reason principally that the vines interfere with the rapid culture of the day. Where a large portion of the culture is done with the hand-hoe, aside from cultivating once in the row with the horse, the thing is somewhat different. Small farmers are not, as a rule, in so much of a hurry to get over a large area, and consequently are desirous of obtaining the largest product, in variety as well as bulk, from a given small area. We all obtain as many bushels of shelled corn from an acre, with several tons of good pumpkins thrown in, as if the corn was planted alone, and it is very little extra work to plant and cultivate the two together as is the corn alone. The two crops interfere so little with each other as not to be perceptible; neither does the soil show any deterioration in following crops, above what it does when corn alone is grown. I think a good way in planting is to plant the corn, and in a few days, or at a proper time afterwards, to over the field and "stick" the seed. You then make an even distribution of the seed and are likely to get your vines where you want them. I recall the time, when a boy long years since, my father used to set me to "stick" the seed after the corn was planted, telling me to take every other row and every third hill and "stick" a reed, covering it well before leaving it. Planted in this way we always had a good pile of pumpkins to feed to the cows in the fall and early winter, as well as plenty for family use, drying, &c. Another thing, in saving seed, the best specimens having the largest scar at blossom end were saved for the purpose, from the reason that seed from such specimens were found most prolific.—*Germantown Telegraph.*

A recommended preventive of cholera: Construct a long, deep trough, keep it supplied with slacked lime, with a reasonable amount of salt, and attract the hogs to it by slopping them there.

ITEMS OF INTEREST.

A strawberry grower says some strawberry plants are naturally barren and should be pulled out and treated as weeds. He goes over the patch when the plants are in blossom and pulls up all plants that have not blossomed.

Calves that are to be kept for dairy purposes should be trained from birth with this in view. They should be petted and kept gentle by constant handling and management, and be accustomed to the use of halters, etc.

According to the trials made at the Indiana Agricultural College, the Ohio blackcap raspberry is by far the best raised, and will stand more freezing and produce the most fruit of any sort, tried with ordinary culture.

If grafting is done early in the spring, the cions may be set the same day they are cut, but the time for such grafting is limited. It is better to secure the scions so they will be fit to use all through April and May, and even till well into June.

Give your chicks meat scraps three times a week in their soft food, and keep plenty of fresh clean water for them to drink. Milk in all shapes is excellent for them. Keep them fresh from lice if you want them to be well and grow rapidly.

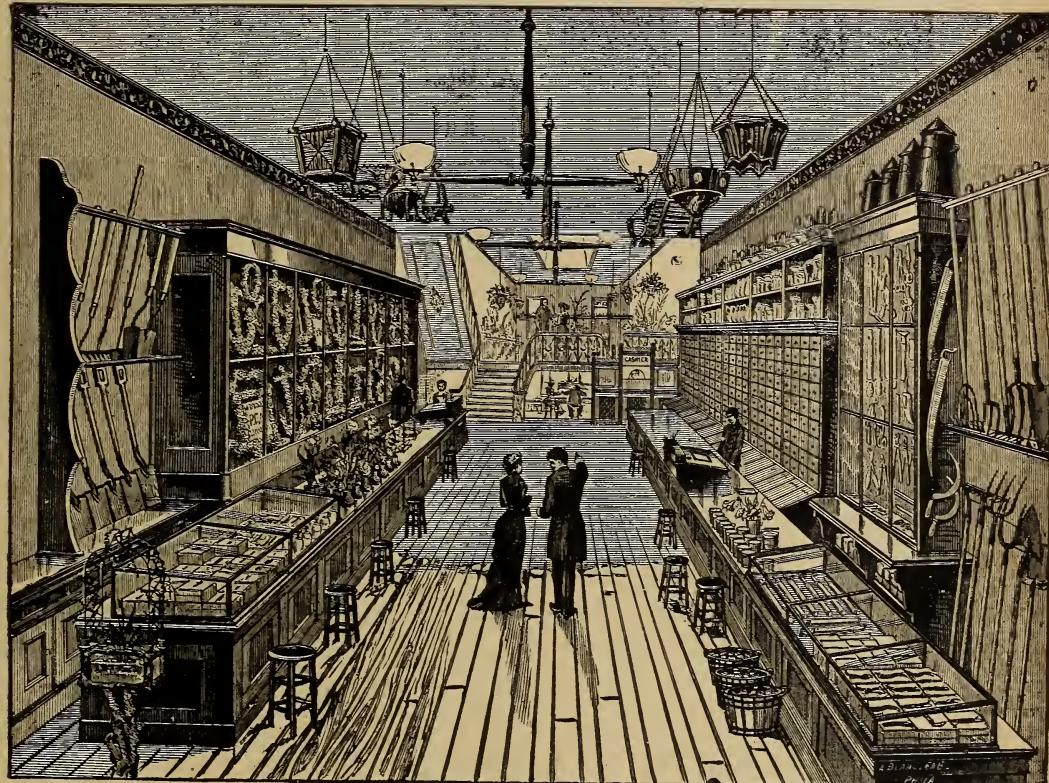
STRAWBERRY SHORTCAKE.—The receipt for making it is as follows: Take about two quarts of berries; make the cake as for soda biscuit; three pints of flour with three teaspoonsful of cream of tartar sifted in it; a teaspoonful of salt, two teaspoonsful of butter and one of lard rubbed into the flour; mix it with a pint of milk and a teaspoonful of soda dissolved in it; roll it out half an inch in thickness and bake in either one or two cakes in a quick oven, about fifteen or twenty minutes. Split the cake open as soon as it comes from the oven, mark it 'round the edges with a knife and separate it with the fingers, as cutting it makes it heavy. Butter both top and bottom cakes, spread the strawberries on the lower one, sprinkle thickly with powdered sugar, lay the top crust on the berries and serve it with rich cream. Bake it in large round or square tins. To be cut at table. This is nice for dessert on the tea-table.

A FLORICULTURAL PALACE.

FAULT FINDING.

The following cut represents the beautiful store of Messrs. Robt. Halliday & Son, No. 238 West Baltimore street. For many years, New York, Philadelphia and other cities in this country were far in advance of Baltimore in houses of this kind, but now we are proud to say, there is no

This world would be quite a pleasant dwelling place could we always escape the bitter and always enjoy the sweet. How delightful would be our life if our own sweet will was our only law and no one ever interfered with us! How beautiful could we make this world were all the power placed in our hands to mould every-



city in this country that can claim a more beautiful florist's display than is found at the above house.

WILL the Agricultural Society, of Montgomery county, accept our thanks for their favors duly received. We wish them ample success at their coming exhibition, June 2d.

thing to our liking! But, very unfortunately for our peace of mind, none of these conditions belong to our lot. It is on this account that we grumble and find fault, which is one of the easiest things in the world to do.

We sometimes wonder how it happens that whenever the Farmers of our land are favored by legislation, which they have greatly needed, to protect their interests,

that some petulant writer will find fault with all such legislation, impugn the motives of the members of the Legislature, and attempt in every way to belittle the work done for the Farmer's benefit.

We have been led into this train of reflection from the fault finding we have seen in reference to the law for the inspection of fertilizers, passed by the last legislature. Farmers have heretofore expressed the desire with great earnestness, that they might be protected from the imposition of fraudulent fertilizers, and that some authoritative and competent officers be appointed to prevent adulterated fertilizers being sold as genuine. The Legislature has done this for them: but instead of encouraging the carrying out of the law, the Legislature is denounced as making a "fat office" for some "political bummer."

If the Farmers of Maryland desire to save themselves from being defrauded, they can do so by a hearty co-operation with the law, putting all fertilizers to the test the Legislature has proposed.

We are well satisfied that those who manufacture honest fertilizers will be among the most willing parties to have their articles tested, and the last ones to find fault with this law. We are also satisfied that the work will be done in a scientific and capable manner at the Agricultural College, and will be of great advantage to all.

MARYLAND STATE AGRICULTURAL SOCIETY.

We are glad to see our State Agricultural Society making arrangements for holding an Exhibition this fall. We well remember, some thirty-five years or more ago, the Maryland State Agricultural Fair, held in Baltimore, was looked upon in all parts of the country as the most enterprising, extensive and successful exhibition held in any State in the Union. With the present enterprising officers and

the various means and conveniences now at their command, we do not see why the Society cannot be restored to its original usefulness.

At the meeting of the executive committee of this Society, held on the 19th ult., a programme was adopted, which while not ready for publication in detail, shows that the Society is in earnest in its endeavor to make this coming exhibition equal in every way if not superior to its predecessors.

The usual attractive premium list for all kinds of live stock will be offered, and with special inducements for a grand display of all varieties of farm implements and machinery, which department will for its first time be placed inside the field, enclosed by the track. Special efforts, however, will be given the racing programme to make this a memorable meeting, about \$10,000 being offered in purses, and the admirers of fine horses will be given an opportunity to see some of the celebrities which have never before come to Baltimore. There will be trotting races, pacing races, running races and steeple chasing with gentleman riders, mile races fast and slow, in harness and over hurdles, etc., etc.

The fair will open Monday, September 13th, a municipal holiday, with a programme of fun and frolic in the way of mule racing, &c., and end with a grand agricultural society ball, at night, when the grounds and ball-room will be lighted by electricity and special trains run to the grounds.

The executive committee are making vigorous efforts to revive the whilom popularity of the Maryland Agricultural Society, and they deserve the good will of the public. Better grounds of more convenient access and accommodation do not exist anywhere, and there is no reason why the coming efforts should not be crowned with substantial success.

INDEBTEDNESS.

No better security can be found for capital than the land. Farms are the underlying rock, upon which the whole superstructure of artificial prices is built. Money is but a representative of produce or some form of farm production. The soil in its vigor gives the only permanent security upon which an income can be surely obtained, and sagacious capital makes its investments upon this fact. Stocks are a fluctuating investment, whether of States or corporations, and are liable to depreciate and utterly fail. Governments are uncertain, States repudiate, railroads are mismanaged; but the land itself is permanent and safe.

The aggregate of indebtedness of our country can never be ascertained. That of the general Government, of the several States, of the cities, of the railroads and other corporations, may be approximated; although statistics are wanting to reveal its fearful magnitude. When we come to that placed upon the farms we are almost wholly in the dark; but we can readily understand that this, also, in the aggregate would appear of immense proportions. It is by far the best for Farmers to do without indebtedness, and he is the happiest mortal who can say with truth, that he has a home of his own free from all claims of other men, and that he owes no man a dollar.

Since this is not possible for all Farmers to say now, and since we can say, as in the commencement of our article, that no better security can be found for capital than the land, we wish to make a suggestion: Money is now awaiting investment, and it can be had at a very low interest in fair sums and on long time. Is it not the part of wisdom for Farmers to take advantage to cut down the rate of interest they are paying? Some have been paying from six to ten per centum on considerable sums,

which with a little management could be reduced to about four per centum, a saving which would take a great amount of pressure from the mind and heart of many a Farmer, and would in very many cases turn his now doubtful struggle into an assurance of success. We hear in daily conversations, and we see in our daily reports from the monetary centres of our country, of the vast amounts lying idle, seeking safe investment, awaiting some call from the people that will bring it out.

DISCOURAGEMENTS IN FARMING.

In farming, as in all other pursuits, there are many drawbacks which are well calculated to dampen the ardor of the sanguine and discourage the faint-hearted. Very often the Farmer plants and reaps in sorrow, and often, too, the autumn's guerdon belies the early promises of the spring. There is to the Farmer generally a wide difference between the fruits of reality and anticipation.

Perhaps one reason for this general disappointment is, most people are disposed to make their estimates too high in the start. Their desires or hopes are extravagant. It is best to make the estimates moderate always, and to give a wide margin for accidents and casualties. There is no calling more liable to casualties than the Farmer's and this fact should never be lost sight of. From the planting of the seed to the last handling every crop is subject to loss—loss by storm and unfavorable weather, by flood or drought, by insects, birds, animals and by the depredations of stock, by thieves and by hasty and careless handling.

And not the crops alone, but the live-stock of the farm, the tools and implements, buildings, fences, vehicles, bills, notes and bank accounts, all and everything that the Farmer has or can have, is

subject to a wide range of casualties. Drawbacks of one kind or another are ever trusting their unwelcome presence before the rugged pathway of the Farmer.

But what shall he say to these things? Must he become despondent, abandon the field and seek some other calling? No; because no calling is exempt from discouragements, and those of commercial or business life are far more acute than any the Farmer knows. He has his discouragements, truly, but he has his compensations and rewards also, and the certainties that buoy him up are laid upon a solid foundation. If the Farmer is a freeholder, and can steer clear of the rock debt, he has cause to look upon even heavy discouragements with a philosophic eye.

In the first place, he has a home that is his and not another's, and though, per chance, it be a very humble one, yet it is a retreat, a resting-place, secure to him and his so long as health and strength remain. This is a comforting thought.

Secondly, the Farmer is sure of a living. You cannot starve a Farmer. His herbs and fields both clothe and feed him, and if he chooses he may snap his finger in the face of the manufacturer and say that he will make his own wares.

Thirdly, no calling has more compensations, more time for relaxation or grander opportunities for mental improvement and intellectual enjoyment.

Let the Farmer think long, then, before he decides to quit the calling that rests upon so solid a basis. Do not yield to discouragements, but bear up afiainst them and reflect that none are exempt from these daily annoyances. Trusting in God and his promises, let him struggle on in faith and hope to the end.

OATS will grow upon almost any kind of soil, but the clays and loams that are sufficiently retentive of moisture are the most favorable.

CAPITAL FOR POULTRY.

We have frequently been astonished at the constant publication, as a fact, that any one can commence a profitable business with poultry that will support a family, with little or no capital. This publication is by no means justifiable; for if not actually a falsehood, yet it borders on the false to a very great extent. With very little expense you can commence to learn the business, which, with suitable capital, will some day be able to support you. This is undoubtedly a fact. It is, however, not to be supposed that anyone can support a family, or even approximate to that desirable end, unless he has a great amount of facilities which only capital can provide. The idea, that any pursuit will bring in a support without the means necessary for its prosecution, is founded upon utopian premises which can never be realized in practical life. As well expect to carry forward any other business enterprise without the needed capital, as that of poultry. If you have all the necessary buildings and all the necessary food, plenty of chickens and plenty of ground for them to range, a good amount of labor and a good amount of skil, then you have the capital which is principally needed. You must have this, however, or any venture you may make will be of no avail. In addition, some capital must be had so that you can afford to wait. "No crop comes in without some delay," and this business also has its delays until everything is in perfect running order.

When we take all into consideration, we would not advise anyone to commence the business, unless he had enough knowledge of it to prosecute it thoroughly, and enough capital to live comfortably until he could bring it into a paying condition.

Subscribe to the MARYLAND FARMER, only \$1.00 per year with a premium.

CROP REPORT FOR MAY, FROM
THE DEPARTMENT OF
AGRICULTURE.

MARYLAND.

The grain crops of this State have never presented so general a promise of large product as they do at present. The same may be said of meadows and pastures. The season has been so propitious that the spring plowing for summer crops is well advanced.

Wheat is well advanced in Maryland, and still growing rapidly. In the mountain district—Alleghany—there was winter-killing. In the central counties a tendency to drought in the latter part of April is indicated.

The weather has been quite favorable in Virginia, and recovery of the brown and withered frosted areas has been rapid. Exposed spots and unsuitable soils are irrecoverable. As a whole, the average condition of the entire breadth is high.

In the Southern States there appears to be a decline in wheat growing; the area is small, and condition, though improved, not very high. The past winter was very unfavorable for winter grain in these States. A correspondent in Georgia declares the winter-freezes were the worst in fifty years. The growth is late, the plants scattering in too many fields. Yet well fertilized areas are reported in fine condition. One correspondent gives the low price of cotton and the need of ready cash as a reason for decline of wheat growing and the use of the land for cotton. Another says that, since cotton has declined 10 per cent., it is necessary to increase the acreage 18 per cent., to get the requisite money. That logic, if influential in the general practice, will keep the cotton States poor.

JUDSON BLASTING POWDER.

Mr. Broderick, the agent for the sale of this valuable article, informs us for the benefit of our readers, that parties having any considerable amount of work to do, will be instructed as to the use of the powder, and the best method of clearing land from stumps, boulders, &c., free. Also that contracts will be made with Farmers to clear up their fields at the most reasonable prices. See "Ad." in this number.

CROPS IN KENT COUNTY.

We were pleased to learn from Mr. John Gale, one of the extensive and working Farmers of Kent county, that the crops in his county were promising fine. Although the wet weather since May 1st had retarded the planting of corn to a considerable extent, the other crops were looking remarkably well. The prospect of peaches, and, in fact, of all fruits, were first-class. Such reports are pleasant to hear.

The papers, not devoted to agricultural subjects, may report a glut of peaches in the beginning of the season, a scarcity in the middle, and again, a plentiful supply in the last part of the peach season. We give very little credit to these reports; but prefer those coming from intelligent Farmers in the peach-growing districts.

Sale of Fine Stock.

We call the attention of our readers to the 5th Annual Sale at Poplar Grove Stock Farm, which is beautifully located in Queen Anne county, Md. The offerings will be a variety of choice stock, bred and reared on this celebrated stock farm. The stock purchased at these annual sales have been carried to various sections of the country, thereby infusing choice blood into herds in nearly all sections of Maryland and adjoining States. Purchasers have been well pleased with what they have carried home in the past. Sales of this kind are very popular in other States, and are largely attended and we hope our people will encourage Mr. Emory in his enterprise.

CORN may be made to grow with manure and skillful cultivation upon almost any kind of soil, but the land peculiarly adapted to it is that which contains a large percentage of vegetable matter, is fine, friable, warm, deep and sufficiently supplied with water by evaporation.

The "Washington Weekly Post."

We have made arrangements with this paper for a clubbing price, viz: Both the *Maryland Farmer* and the *Washington Weekly Post* for \$1.75. We quote from their circular letter to show the particular feature, which will be of value to its readers and which makes the arrangement particularly gratifying to us:

"We print regularly a very full record of proceedings in Congress and the best speeches delivered from time to time by the Democratic and Republican leaders on the great questions which come before Congress for legislative consideration and action.

This record will make the *Weekly Post* of interest and value to all thinking men irrespective of party lines. The *Post* will aim to state the truth, as to proceedings in Washington, without prejudice or narrowness. The record which it intends to present, will be full and impartial."

THE GARDEN.

Early varieties of potatoes should be planted either very early or very late. The idea is to have the tubers form either before extremely hot weather or after the hottest has passed. The only objection to planting early potatoes even as late as the 1st of July is the difficulty in keeping the seed in good condition until that late date. There is time enough to mature a good crop with seed planted any time in June.

Farmers cannot expect to raise choice vegetables without labor now, but the garden plat really pays better than field crops for the time and labor given it. Weed seeds are germinating rapidly, and most garden soils are well filled with them. The hoe and the rake must be plied constantly, or weeds will get the best of the struggle. Throwing the earth up a little around most growing vegetables is better than level culture.

The last refuge of weeds on a farm is around fences. The perennials, like quack grass and Canada thistle, hold their own here because their roots extend beyond the reach of the plow. Some pests, like a red-root and charlock, are more plentiful

around fences, because when hand gathering is practiced the weeds are thrown in fence corners, where a part of them ripen their seeds. The best way to clear a fence row of weeds, is, if possible, to take away the fence, cultivate in some hoed crop and re-seed with grass.

Covering seeds too deeply may prevent germination by cutting off the needed oxygen. In case the seed would germinate, if covered too much, the store of food in the seed, designed for the plumule's use, may become exhausted before the coat of earth is penetrated, and death ensue.

If you are young, plant trees; if you are about to exchange time for eternity, plant trees; they will be a more enduring monument to your memory than the costly marble.

Root crops should early be gone over, thinning them out where standing too close, and setting in some of the spare plants where vacancies occur. This should be done in a moist time, if possible.

Twenty Dollars' Worth of Manure for Almost Nothing.

If you have any dead animal, say for instance, the body of a horse, do not suffer it to pollute the atmosphere by drawing it away to the woods or any out of the way place, but remove it a short distance only from your premises, and put down four or five loads of muck or sods, place the carcass thereon and sprinkle it over with quick-lime, and cover over immediately with sods or mould, sufficient to make, with what had been previously added, 20 good wagon loads, and you will have within twelve months a pile of manure worth \$20 for any crop you choose to put it upon. Use a proportionate quantity of mould for smaller animals, but never less than 20 good wagon loads for a horse; and, if any dogs manifest too great a regard for the enclosed carcass, shoot them on the spot.

BUCKWHEAT is frequently sown for the purpose of ploughing-in as a green manure to precede the wheat crop. Though not equal to clover, it is yet beneficial to lands deficient in organic matter. It should be turned under when beginning to blossom.

Lawn Embellishments.

Shrubs are valued for their bloom as well as for form and foliage. Each variety will serve some special end. As a rule, plant in irregular groups, as directed for trees. At projecting points in shrub masses, plant some hardy herbaceous perennial. Use vines for porches or for covering a half dead tree-top or rubbish pile. Plant flowers mostly at the side of the house in irregular but gracefully-shaped beds, and about the trunks of trees when they are young, perhaps. No special paths are needed about flower or shrub groups. Rock work is seldom satisfactory, and is only appropriate in a retired portion of the grounds. A pile of shells, rocks and scoria in the front yard is sadly out of place. Heap them in some back and shady corner and you will find great delight in transplanting from the woods and meadows an assortment of hepaticas, spring beauties, blood-root, trilliums, bellworts, phloxes and ferns. If you have a pond near by, introduce some water lilies, cat-tail flags, pickerel weed, arrow-head, and near by set some weeping willows and birches and ashes. Do not despise flower, shrub or tree, because it is native or "common." As a rule, the best known is better than the imported variety. Give thought and attention to all the details of making a pleasant home. It is a worthy work. You will be surprised to find how much beauty can be attained at little cost, and how rapidly everything hastens forward to the completed plan in your own mind. You will have a constant comfort and a fresh hope realized every year as the trees grow, and transformation follows transformation toward the fulfillment of your original design.

PROF. W. J. BEAL.

RYE is frequently sown for fodder, being either pastured during the winter and spring or cut green for soiling stock in stable. It affords a large amount of valuable food, and the crop of grain is improved by pasturing to a certain point.

FENCES have almost entirely disappeared in Maine, and the Lewiston *Journal* regards the circumstance as indicative of the progress which Maine has made in its civilization.

To Dissolve Large Bones for Manure Without Expense.

Take an old flour-barrel and put into the bottom a layer of hardwood ashes; put a layer of bones on top of the ashes, and add another layer of ashes, filling the space between the bones with them; then add bones and ashes alternately, finishing off with a thick layer of ashes. When your barrel is filled pour on water, (urine is better,) just sufficient to keep them wet, but do not on any account suffer it to leach one drop; for that would be like leaching your dungheap. In the course of time they will heat and eventually soften down, so that you can crumble them with your finger. When sufficiently softened, dump them out of the barrel on a heap of dry loam, and pulverize and crumble them up till they are completely amalgamated into one homogeneous mass with the loam, so that it can be easily handled and distributed whenever required. You may rely on it, this manure will leave its mark, and show good results wherever it is used.

DIANA MILLS, VA., March 31, '86.

Ezra Whitman, Esq.:

Please send me the "Maryland Farmer" for one year, commencing with the March number. I am more than pleased with your journal and would not be without it for double its price.

Yours, etc., J. S. H.

CHARLESTOWN, W. VA., May 12, '86.

Ezra Whitman, Esq.:

Enclosed find postal note for \$2 for the "Farmer" for 1886 and 1887. It is a valuable work and one cannot well dispense with it. Very Respectfully,

Jos. Law Hooff.

IF a sheep is injured in any way, wash the wound, bathe with turpentine and coat with tar. This will cleanse the wound, prevent danger of the animal taking cold in it, and will aid the wound materially in healing.

IT is poor economy to purchase or plant cheap seed. Good seed is the foundation for a good crop.

DOMESTIC RECIPES.

GOOSEBERRY SYRUP.—One pint of juice, one pound twelve ounces of sugar. To twelve pounds of ripe gooseberries add two pounds of cherries without stones, squeeze out the juice, and finish as others.

APPLE CUSTARD.—One pint of *good* stewed apples, a quarter pound of butter, half a pint of cream, three eggs, beaten light, sugar and grated nutmeg to taste. Mix the ingredients together, and bake in a puff-paste in a moderate stove.

YORKSHIRE PUDDING, WITH ROAST BEEF.—Five tablespoonfuls of flour mixed with one of salt, one pint of milk, and three well-beaten eggs. Butter a square pan and put the batter in it; set it in the oven until it rises and is slightly crusted on top; then place it under your beef roasting before the fire, or in the oven, and baste it as you do your meat.

RUMBLED EGGS.—Very convenient for invalids, or, when required, a light dish for supper. Beat up three eggs with two ounces of fresh butter, or well-washed salt butter; add a teaspoonful of cream or new milk. Put all in a saucepan and keep stirring it over the fire for nearly five minutes, until it rises up like *souffle*, when it should be immediately dished on buttered toast.

TO DRY MUSHROOMS.—Wipe them clean, take away the brown part and peel off the skin; lay them on sheets of paper to dry, in a cool oven, when they will shrivel considerably. Keep them in paper bags, which hang in a dry place. When wanted for use, put them into cold gravy, bring them gradually to simmer, and it will be found that they will regain nearly their usual size.

RICE AND APPLE PUDDING.—Boil a cupful of rice for ten minutes, drain it through a hair sieve until quite dry. Put a cloth into a pudding basin and lay the rice around it like a crust. Cut six apples into quarters and lay them in the middle of the rice with a little chopped lemon peel, a couple of cloves and some sugar. Cover the fruit with some rice, tie up tight, and boil for an hour. Serve with melted butter, sweetened and poured over it.

Books, Catalogues, Publications, &c.

WE mention the "Crop Report," of the Commissioner of Georgia, for May 1st. The spring has been backward with cold rains, which seem to have retarded every department of work.

"BULLETIN NO. 3," of the Louisiana Sugar Experiment Station is received. The tables of experiments occupy almost the entire publication. We have not examined them thoroughly but should think them of great value to parties interested.

FRIESIAN HERD BOOK.—We have received from Hon. Claas Vocke, Consul of the Netherlands, in Baltimore, the complete "Pedigree Register of the Friesian Cattle," comprising 414 pages. It is a useful work to all those dealing in this stock, and we shall take great pleasure in consulting it.

THE WOODBERRY NEWS.—Since the enlargement and beautifying of this paper, it makes one of the most substantial contributions to our country exchanges. It makes a fine appearance and is conducted with decided talent and tact. We congratulate the publishers on these evidences of success.

READING the "Speech on the Labor Question" by Hon. Wm. H. Cole, in the House of Representatives, one is almost tempted to build a Chinese wall around our country to keep out undesirable foreigners; and yet they give us the element of success in all the great undertakings in which our country is so active.

WE have received from the Department of Agriculture the "Report of the Condition of Winter Grain," etc., from which we are pleased to make extracts in this number. Also, the several reports on "Principles and Methods of Soil Analysis," "Experiments in the Manufacture of Sugar," and "Chemical Composition of American Canals." These reports are among the valuable issues of the Department and calculated to supply standard facts for future reference.

WE have received a pamphlet written by Rear Admiral Daniel Ammen, called "The Certainty of the Nicaragua Canal, Contrasted with the Uncertainties of the Eads Ship Railway," and also a reply to this pamphlet by E. L. Correll. We must acknowledge ourselves not sufficiently conversant with the subject to form any independent opinion as to the feasibility of either railway or canal. We have, however, much confidence in the judgment of Admiral Ammen, as also in his disinterested reports.

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A Cow should never be allowed to skip a milking, as the retention of so large a volume of milk in the udder will inflame it and injure the quality of the milk, and perhaps the udder also.